

CLAIMS

1. A Group B Streptococcus polypeptide or protein having a sequence selected  
5 from those described in fig 1, or fragments or derivatives thereof.
2. Derivatives or variants of the proteins, polypeptides, and peptides as claimed in  
claim 1 which show at least 50% identity to those proteins, polypeptides and peptides  
claimed in claim 1.  
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3. A Group B Streptococcus polypeptide or protein, or derivative or variant  
thereof, as claimed in claim 1 or claim 2 , which is isolated or recombinant.  
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4. A nucleic molecule comprising or consisting of a sequence which is:  
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  - (i) any of the DNA sequences set out in figure 1 herein or their RNA  
equivalents;
  - (ii) a sequence which is complementary to any of the sequences of (i);
  - (iii) a sequence which codes for the same protein or polypeptide, as those  
20 sequences of (i) or (ii);
  - (iv) a sequence which shows substantial identity with any of those of (i), (ii)  
and (iii); or
  - (v) a sequence which codes for a derivative, or fragment of a nucleic acid  
25 molecule shown in figure 1.
5. A vector comprising one or nucleic acid molecules as defined in claim 4.  
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6. A vector as claimed in claim 4 further comprising nucleic acid encoding any  
one or more of the following: promoters, enhancers, signal sequences, leader

sequences, translation start and stop signals, DNA stability controlling regions, or a fusion partner.

7. The use of a vector as claimed in claim 5 or claim 6 in the transformation or  
5 transfection of a prokaryotic or eukaryotic host.
8. A host cell transformed with a vector as defined in claim 5 or claim 6..
9. A process for producing a Group B Streptococcus polypeptide or protein, or  
10 derivative or variant thereof, as claimed in claim 1 or claim 2, the process comprising expressing the polypeptide or protein in a host cell as claimed in claim 8.
10. An antibody, an affibody, or a derivative thereof which binds to one or more of the proteins, polypeptides, peptides, fragments or derivatives thereof, as defined in any  
15 one of claims 1 to 3.
11. An immunogenic composition comprising one or more of the proteins, polypeptides, peptides, fragments or derivatives thereof as defined in any one of claims 1 to 3.  
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12. An immunogenic composition as claimed in claim 11 wherein the proteins, polypeptides, peptides, or fragments or derivatives thereof include ID-65 or ID-83, ID-89, ID-93 or ID-96.
- 25 13. An immunogenic composition as claimed in claim 11 or claim 12 which is a vaccine.
14. An immunogenic composition comprising one or more of the nucleic acid sequences as defined in claim 4.  
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15. An immunogenic composition as claimed in claim 14 wherein the nucleic acid sequences include ID-65 or ID-66.

16. An immunogenic composition as claimed in claim 14 or claim 15 which is a  
5 vaccine.

17. Use of an immunogenic composition as defined in any one of claims 11 to 16 in the preparation of a medicament for the treatment or prophylaxis of Group B Streptococcus infection.

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18. A method of detection of Group B Streptococcus which comprises the step of bringing into contact a sample to be tested with at least one antibody, affibody, or a derivative thereof, as defined in claim 10.

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19. A method of detection of Group B Streptococcus which comprises the step of bringing into contact a sample to be tested with at least one protein, polypeptide, peptide, fragments or derivatives as defined in any one of claims 1 to 3.

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20. A method of detection of Group B Streptococcus which comprises the step of bringing into contact a sample to be tested with at least one nucleic acid molecule as defined in claim 4.

21. A kit for the detection of Group B Streptococcus comprising at least one antibody, affibody, or derivatives thereof as defined in claim 10.

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22. A kit for the detection of Group B Streptococcus comprising at least one Group B Streptococcus protein, polypeptide, peptide, fragment or derivative thereof as defined in any one of claims 1 to 3.

23. A kit for the detection of Group B Streptococcus comprising at least one nucleic acid molecule as defined in claim 4.
24. A method of determining whether a protein, polypeptide, peptide, fragment or derivative thereof as defined in any one of claims 1 to 3 represents a potential antimicrobial target which comprises inactivating said protein and determining whether Group B Streptococcus is still viable.